

REMARKS/ARGUMENTS

Claims 1, 3-6, and 8-11 are pending in this application. Claims 1, 6, and 8 are independent. Claims 1 and 3-6 are amended. Claims 8-11 are new. Claims 2 and 7 are hereby canceled without prejudice to or disclaimer of the subject matter previously recited therein. No new matter has been added.

The courtesies extended to Applicant's representatives by Examiner Brian P. Yenke at the interview held on April 8, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicant's record of the interview.

OBJECTIONS TO THE DRAWINGS

On page 2, the Office Action objects to the drawings because Figures 1, 2(a), 2(b), and 2(c) lack text legends or descriptions. In response, Applicant hereby files corrected drawing sheets that include descriptions. Accordingly, Applicant respectfully requests withdrawal of the drawing objections.

INFORMATION DISCLOSURE STATEMENT

On page 2, the Office Action suggests including copies of references cited in the International Search Report mailed on December 28, 2005. In response, Applicant hereby submits an Information Disclosure Statement with copies of the

three Non-Patent Literature references cited in the International Search Report. Regarding the Phuc-Nguyen reference, listed as a "X" reference for claims 1-7, Applicant respectfully submits that Phuc-Nguyen is silent regarding the "at least one transparency value" now recited by independent claim 1. For newly added independent claim 8, Applicant respectfully submits that Phuc-Nguyen does not disclose, teach, or suggest the recited decoder elements.

More specifically, Applicant respectfully submits that while Phuc-Nguyen does provide blending (section 2.1.1., page 257), Phuc-Nguyen's blending uses "a linear combination of pixels of N and M weighted by the transparency values of N." Thus, Phuc-Nguyen's blending uses an equation that is identical to the background equation presented in paragraph [0006] of the published specification of this application. Consequently, Applicant respectfully submits that Phuc-Nguyen clearly lacks the recited use of separate equations, an improvement detailed in paragraphs [0034] and [0035] of the published specification of this application.

REJECTION UNDER 35 U.S.C. § 101

On pages 3-4, the Office Action rejects claims 1-5 and 7 under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter. In particular, the Office Action alleges that the method may be implemented by software or by a

“carrier wave” and recommends deletion of references to non-statutory subject matter in the disclosure. Applicant respectfully traverses this rejection.

In response to the rejection, Applicant hereby deletes references to software in the disclosure. As noted in the Interview Summary, the Examiner agreed to this proposed amendment. Moreover, as suggested by Examiner Yenke during the interview on April 8th, 2009, Applicant hereby amends independent claim 1 to recite a decoder, a particular apparatus. Thus, Applicant respectfully submits that claim 1 is statutory under at least the first prong of the *Bilski* test.

Claims 3-5 depend from claim 1 and contain the statutory subject matter of claim 1. Claims 2 and 7 are canceled. Accordingly, Applicant respectfully requests withdrawal of the rejections of claims 1-5 and 7 under 35 U.S.C. § 101.

REJECTIONS UNDER 35 U.S.C. § 102

On pages 4-5, the Office Action rejects claims 1, 2, 4, 6, and 7 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 6,459,814 to Li et al (hereinafter “Li”). Applicant respectfully traverses this rejection.

As amended, independent claims 1 and 6 now recite, in part, the following subject matter: “the first composition function based upon at least a transparency component Nalpha y of the luminance component of the first object” and the second composition function is “based upon at least a transparency component

Nalpa uv of the chrominance component of the first object” (emphasis added). This subject matter finds support in the specification, for example, in paragraphs [0034] and [0035]. As described in paragraph [0033], this subject matter is beneficial because it allows the system to determine whether a second object is behind or in front of a first object.

As further described in paragraph [0033], blending is done sequentially. Such blending avoids the chrominance problems described in paragraph [0009] because it uses transparency and shape components that have the same resolution as the luminance component, as disclosed in paragraph [0046]. Moreover, the second composition function, used for determining the chrominance component of the blended object, depends upon a set of associated values of the first composition function, used for determining the luminance component of the blended object. Therefore, as disclosed in paragraph [0048], such sequential blending produces more precise computation of the chrominance component Puv.

Applicant respectfully submits that Li does not disclose, suggest, or teach the use of transparency values in this manner for luminance and chrominance components. Instead, Li is silent regarding this subject matter. While Li provides shape coding, line 37 of col. 1 in Li only distinguishes between transparent and opaque data, lacking any other values. Li certainly does not provide for separate calculation of chrominance and luminance values based upon two transparency

values (Nalpha_y, Nalpha_{uv}). Thus, Applicant respectfully submits that claims 1 and 6 are allowable over Li.

Claim 4 depends from independent claim 1. Thus, Applicant respectfully submits that claim 4 is allowable at least on the basis of its dependency from claim 1. Claims 2 and 7 have been canceled. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 1, 2, 4, 6, and 7 under 35 U.S.C. § 102(b)

REJECTIONS UNDER 35 U.S.C. § 103

On page 5, the Office Action rejects claims 3 and 5 under 35 U.S.C. § 103(a) as allegedly unpatentable over Li. In particular, the Office Action alleges that the use of an average or “OR” function is conventional. Applicant respectfully traverses this rejection.

Claim 3 recites, in part, the following subject matter: “wherein a chrominance value is associated with four luminance values and four transparency values, the **second composition function** being an average of the four transparency values” (emphasis added). Claim 5 recites, in part, the following subject matter: “a chrominance value is associated with four luminance values and four shape values, the **second composition function** being an ‘OR’ function between the four associated shape values” (emphasis added). As described in paragraph [0052], the

second composition function is not conventional. Instead, it produces improved quality in the blended object of Fig. 2c.

Moreover, Applicant respectfully submits that Li teaches away from the recited subject matter. Instead of using transparency values, Li, as depicted in Fig. 4, only uses “chroma” and “luma” values. In addition, Li’s averaging technique, disclosed on lines 65-67 of col. 2, only uses the chrominance plane.

Claims 3 and 5 depend from independent claim 1. Thus, Applicant respectfully submits that claim 3 and 5 are allowable at least on the basis of their dependencies upon an allowable claim. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 3 and 5 under 35 U.S.C. § 103(a).

NEWLY ADDED CLAIMS 8-11

Applicant respectfully submits that the references of record do not disclose, suggest, or teach the subject matter of newly added claim 8. In particular, claim 8 recites “a **motion compensation circuit** coupled to the shape decoder and the motion decoder; a reconstruction circuit, coupled to the shape decoder, the texture decoder, and the motion decoder” and “a picture memory coupled to the reconstruction circuit that **provides a feedback signal to the motion compensation circuit**” (emphasis added). This subject matter finds support, for example, in Fig. 3 and paragraph [0030].

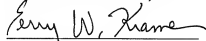
As depicted in Fig. 2, Li's decoder [270] comprises a texture decoder [272] and a shape decoder [274]. Li's decoder clearly lacks a motion compensation circuit. While Li's encoder [210] includes a motion compensation module [229], the operation of this module does not resemble the claimed motion compensation circuit. In particular, Applicant respectfully submits that Li's motion compensation module does not receive a feedback signal in the claimed manner. Thus, Applicant respectfully submits that claim 8 is allowable.

Claims 9-11 respectively depend upon independent claims 1, 6, and 8. Thus, claims 9-11 are allowable at least on the basis of their respective dependencies from allowable claims. The specification provides support for the subject matter of claims 9-11, for example, in paragraphs [0042] through [0045].

CONCLUSION

In view of the remarks above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. In the event that the fees submitted prove to be insufficient in connection with the filing of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess fees to such Deposit Account. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Aaron Waxler, of NXP Corporation at (408) 474-5256.

Respectfully submitted,
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